

10/S82,609  
~~10/513699~~

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEAL1624

PASSWORD:917P742

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'CASREACT' AT 18:01:31 ON 13 AUG 2007  
FILE 'CASREACT' ENTERED AT 18:01:31 ON 13 AUG 2007  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)  
ENTER STRUCTURE FORMAT (SIM), NOS:ide  
'IDE' IS NOT A VALID STRUCTURE FORMAT KEYWORD  
Structure Formats  
SIA ----- Structure Image, Attributes, and map table if it contains  
          data. (Default)  
SIM ----- Structure Image.  
SAT ----- Structure Attributes and map table if it contains data.  
SCT ----- Structure Connection Table and map table if it contains  
          data.  
SDA ----- All Structure Data (image, attributes, connection table and  
          map table if it contains data).  
NOS ----- NO Structure data.  
ENTER STRUCTURE FORMAT (SIM), NOS:end

=> .

. IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> file casreact

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	234.75	938.13

FILE 'CASREACT' ENTERED AT 18:05:20 ON 13 AUG 2007  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is  
held by the publishers listed in the PUBLISHER (PB) field (available  
for records published or updated in Chemical Abstracts after December  
26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 11 Aug 2007 VOL 147 ISS 8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

\*\*\*\*\*  
\*  
\* CASREACT now has more than 12 million reactions \*  
\*

<12/04/2007>

Erich Leese

10/582,609

**EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	501	(546/121,546/83,544/333,544/127). CCLS.	US-PGPUB; USPAT	OR	OFF	2007/08/13 17:19
L2	1	L1 AND DIHYDROPYRANO	US-PGPUB; USPAT	OR	ON	2007/08/13 17:20
L3	1	L2 AND IMIDAZO	US-PGPUB; USPAT	OR	ON	2007/08/13 17:20
L4	1	L3 AND PYRIDINE	US-PGPUB; USPAT	OR	ON	2007/08/13 17:20

10/513699

\*\*\*\*\*

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

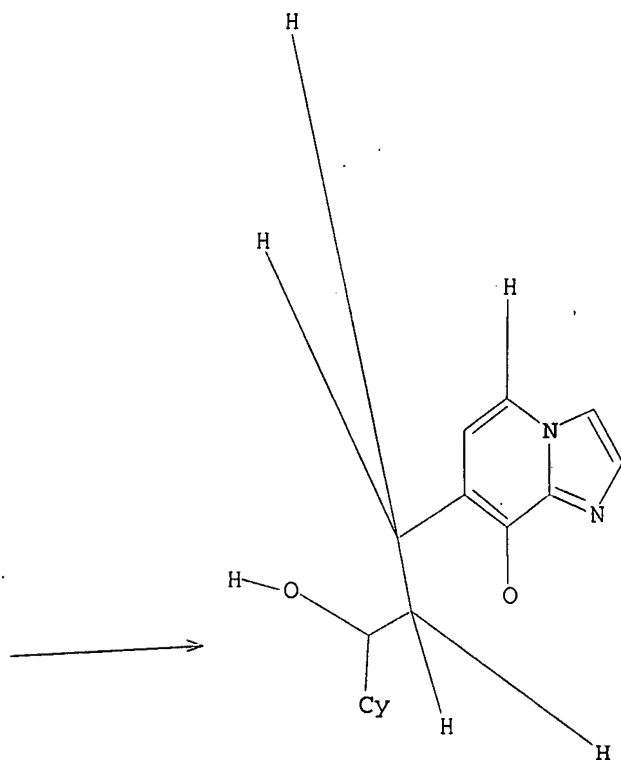
Uploading C:\Program Files\Stnexp\Queries\10582609b.str

L17        STRUCTURE UPLOADED

=> d l17

L17 HAS NO ANSWERS

L17                STR



Structure attributes must be viewed using STN Express query preparation.

=>

Uploading C:\Program Files\Stnexp\Queries\10582609a.str

L18        STRUCTURE UPLOADED

=> d l18

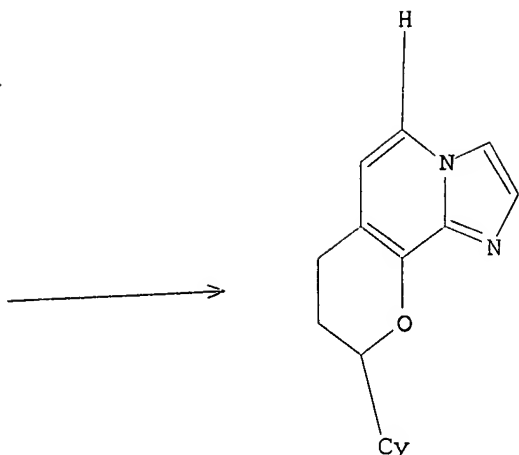
L18 HAS NO ANSWERS

L18                STR

<12/04/2007>

Erich Leese

10/513699



Structure attributes must be viewed using STN Express query preparation.

=> s l17 full

FULL SEARCH INITIATED 18:06:08 FILE 'CASREACT'

SCREENING COMPLETE - 46 REACTIONS TO VERIFY FROM 6 DOCUMENTS

100.0% DONE 46 VERIFIED 0 HIT RXNS 0 DOCS

SEARCH TIME: 00.00.01

L19 0 SEA SSS FUL L17 ( 0 REACTIONS)

=> s l18 full

FULL SEARCH INITIATED 18:06:13 FILE 'CASREACT'

SCREENING COMPLETE - 1191 REACTIONS TO VERIFY FROM 57 DOCUMENTS

100.0% DONE 1191 VERIFIED 10 HIT RXNS 2 DOCS

SEARCH TIME: 00.00.01

L20 2 SEA SSS FUL L18 ( 10 REACTIONS)

=> d ibib abs fhit

L20 ANSWER 1 OF 2 CASREACT COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 111:77237 CASREACT

TITLE: Antiulcer agents. 4. Conformational considerations and the antiulcer activity of substituted imidazo[1,2-a]pyridines and related analogs

AUTHOR(S): Kaminski, James J.; Puchalski, Chester; Solomon, Daniel M.; Rizvi, Razia K.; Conn, David J.; Elliott, Arthur J.; Lovey, Raymond G.; Guzik, Henry; Chiu, P. J. S.; et al.

CORPORATE SOURCE: Pharm. Res. Div., Schering Res., Bloomfield, NJ, 07003, USA

SOURCE: Journal of Medicinal Chemistry (1989), 32(8), 1686-700  
CODEN: JMCMAR; ISSN: 0022-2623

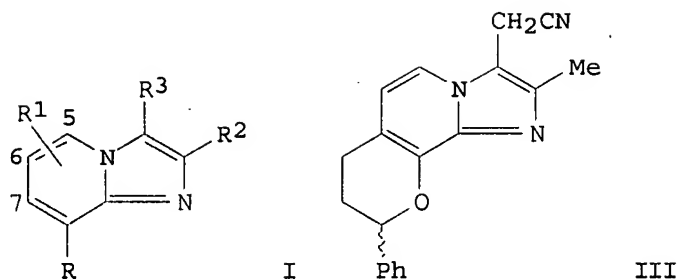
DOCUMENT TYPE: Journal

LANGUAGE: English

GI

<12/04/2007>

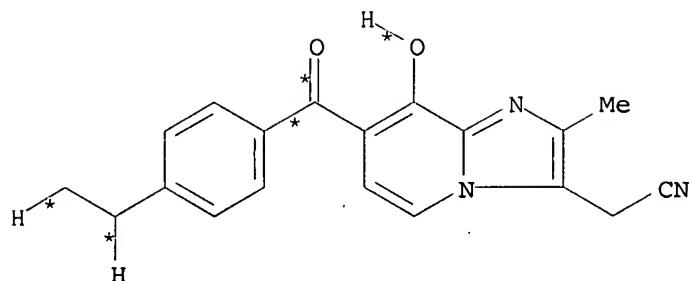
Erich Leese



AB Definition of the interrelationship between the conformational characteristics of a series of substituted imidazo[1,2-a]pyridines and their antiulcer activity was investigated by examining the conformational properties of imidazo[1,2-a]pyridine I [R = PhCH<sub>2</sub>O, R<sub>1</sub> = H, R<sub>2</sub> = Me, R<sub>3</sub> = CH<sub>2</sub>CN (II)], by using a variety of exptl. and theor. methods. The result of these studies was the identification of two distinctly different candidates, designated the folded and the extended conformation, resp., to represent the two possible min.-energy conformations of II. In order to select the biol. relevant conformer, a group of 3-substituted 2-methylimidazo[1,2-a]pyridines, having either a cis- or a trans-2-phenylethenyl substituent at the 8-position, were designed as conceptually simple and synthetically accessible semirigid analogs of the resp. candidate conformers. Gastric antisecretory activity was found to reside only in the trans isomers I (R = trans-PhCH:CH, R<sub>1</sub> = H, R<sub>2</sub> = Me; R<sub>3</sub> = Me, CH<sub>2</sub>CN, NH<sub>2</sub>), which mimic the extended conformation. This observation led to the construction of imidazo[1,2-a]pyrano[2,3-c]pyridine-3-acetonitrile (III), a rigid tricyclic analog that is effectively locked in the extended conformation and that exhibited an antiulcer profile comparable to that of prototype II. These results unequivocally demonstrate that, in accord with expectation for a drug operating at a specific receptor, the conformational characteristics of the mol. have a substantial effect in determining its antiulcer activity. More precisely, it has been demonstrated that it is the extended conformation of II that represents the bioactive form of the drug. These results constitute the basis for a mol. probe that should aid in the investigation of the as yet uncharacterized gastric proton pump enzyme (H<sup>+</sup>/K<sup>+</sup>-ATPase), by means of which II and its analogs presumably exert their pharmacol. actions.

RX(54) OF 213      ...DT ==> DU...

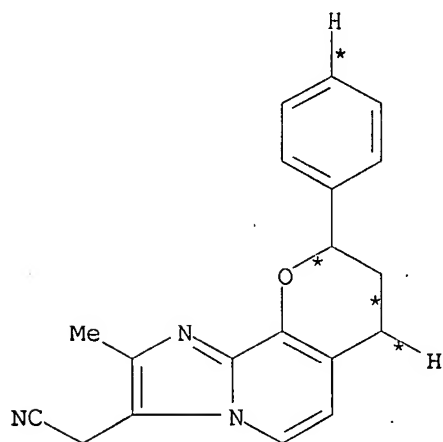
10/513699



● HCl

DT

(54) →



DU

RX(54) RCT DT 121394-50-1

STAGE(1)

RGT C 16940-66-2 NaBH4

SOL 64-17-5 EtOH, 75-09-2 CH2Cl2

STAGE(2)

RGT DV 109-63-7 BF3-Et2O

SOL 75-09-2 CH2Cl2

PRO DU 93749-57-6

NTE sand used in second step

=> d ibib abs hitstr 2

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

<12/04/2007>

Erich Leese

ABS ----- GI and AB  
 ALL ----- BIB, AB, IND, RE, Single-step Reactions  
 APPS ----- AI, PRAI  
 BIB ----- AN, plus Bibliographic Data  
 CAN ----- List of CA abstract numbers without answer numbers  
 CBIB ----- AN, plus Compressed Bibliographic Data  
 DALL ----- ALL, delimited (end of each field identified)  
 IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IND ----- Indexing data  
 IPC ----- International Patent Classifications  
 ISTD ----- STD, indented with text labels  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations  
  
 MAX ----- Same as ALL  
 PATS ----- PI, SO  
 SCAN ----- TI and FCRD (random display, no answer number. SCAN  
 must be entered on the same line as DISPLAY, e.g.,  
 D SCAN.)  
 SSRX ----- Single-Step Reactions (Map, Diagram, and Summary for  
 all single-step reactions)  
 STD ----- BIB, IPC, and NCL  
  
 CRD ----- Compact Display of All Hit Reactions  
 CRDREF ----- Compact Reaction Display and SO, PY for Reference  
 FHIT ----- Reaction Map, Diagram, and Summary for first  
 hit reaction  
 FHITCBIB --- FHIT, AN plus CBIB  
 FCRD ----- First hit in Compact Reaction Display (CRD) format  
 FCRDREF ----- First hit in Compact Reaction Display (CRD) format with  
 CA reference information (SO, PY). (Default)  
 FPATH ----- PATH, plus Reaction Summary for the "long path"  
 FSPATH ----- SPATH, plus Reaction Summary for the "short path"  
 HIT ----- Reaction Map, Reaction Diagram, and Reaction  
 Summary for all hit reactions and fields containing  
 hit terms  
 OCC ----- All hit fields and the number of occurrences of the  
 hit terms in each field. Includes total number of  
 HIT, PATH, SPATH reactions. Labels reactions that have  
 incomplete verifications.  
 PATH ----- Reaction Map and Reaction Diagram for the "long  
 path". Displays all hit reactions, except those  
 whose steps are totally included within another hit  
 reaction which is displayed  
 RX ----- Hit Reactions (Map, Diagram, Summary for all hit reactions)  
 RXG ----- Hit Reaction Graphics (Map and Diagram for all hit reactions)  
 RXL ----- Hit Reaction Long (Map, Diagram, Summary for all hit reactions)  
 RXS ----- Hit Reaction Summaries (Map and Summary for all hit reactions)  
 SPATH ----- Reaction Map and Reaction Diagram for the "short  
 path". Displays all single step reactions which  
 contain a hit substance. Also displays those  
 multistep reactions that have a hit substance in both  
 the first and last steps of the reaction, except for

10/513699

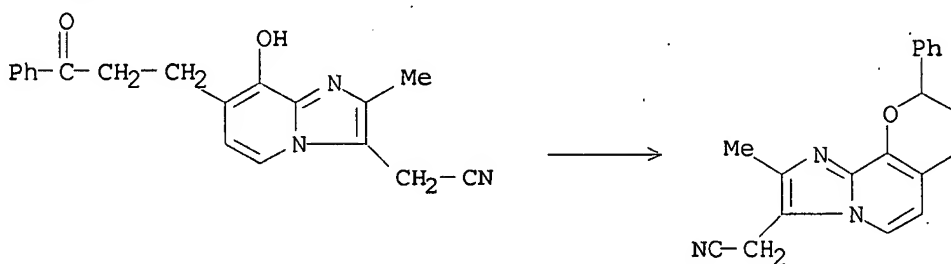
those hit reactions whose steps are totally included  
within another hit reaction which is displayed

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of combinations include: D TI; D BIB RX; D TI, AU, FCRD. The information is displayed in the same order as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH, FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may be used with the DISPLAY command to display the record for a specified Accession Number.

ENTER DISPLAY FORMAT (FCRDREF):.

L20 ANSWER 2 OF 2 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 3



HCl

REF: U.S., 4468400, 28 Aug 1984

=> d his

(FILE 'HOME' ENTERED AT 17:27:32 ON 13 AUG 2007)

FILE 'REGISTRY' ENTERED AT 17:27:41 ON 13 AUG 2007

L1 STRUCTURE UPLOADED

L2 189 S L1 FULL

FILE 'CAPLUS' ENTERED AT 17:28:17 ON 13 AUG 2007

L3 25 S L2 FULL

FILE 'REGISTRY' ENTERED AT 17:30:26 ON 13 AUG 2007

L4 STRUCTURE UPLOADED

L5 189 S L1 FULL

L6 20 S L4 FULL

L7 11 S L1

L8 1 S L4

FILE 'REGISTRY' ENTERED AT 17:42:10 ON 13 AUG 2007

L9 STRUCTURE UPLOADED

L10 189 S L9 FULL

FILE 'CAPLUS' ENTERED AT 17:42:34 ON 13 AUG 2007

L11 25 S L10 FULL

FILE 'CASREACT' ENTERED AT 17:46:49 ON 13 AUG 2007

<12/04/2007>

Erich Leese



10/513699

L12	STRUCTURE UPLOADED
L13	STRUCTURE UPLOADED
L14	0 S L12
L15	2 S L12 FULL
L16	0 S L13 FULL

FILE 'CASREACT' ENTERED AT 18:05:20 ON 13 AUG 2007

L17	STRUCTURE UPLOADED
L18	STRUCTURE UPLOADED
L19	0 S L17 FULL
L20	2 S L18 FULL